

## VACCINE

BOS, Martine Petronella, et al.  
Application No. 10/584,362

## REPLACEMENT SHEET

Imp-FAM18	LARLFSLKPLVLALGFCFGTHCAAADAVAAEETDNPTAGGSVRSVSEPIQPTSLSLGSTC	60
NMB0280	LARLFSLKPLVLALGFCFGTHCAAADAVAAEETDNPTAGESVRSVSEPIQPTSLSLGSTC	60
NMA2207	MARLFSLKPLVLALGFCFGTHCAAADAVAAEETDNPTAGGSVRSVSEPIQPTSLSLGSTC	60
	:*****	*****
Imp-FAM18	LFCSNESGSPERTEAAVRGSGEASI PEDYTRIVADKVEGQSQVQVRAEGNVVVERNRTTL	120
NMB0280	LFCSNESGSPERTEAAVQGSGEASI PEDYTRIVADRMEGQSQVQVRAEGNVVVERNRTTL	120
NMA2207	LFCSNESGSPERTEAAVQGSGEASI PEDYTRIVADRMEGQSQVQVRAEGNVVVERNRTTL	120
	:*****	*****
Imp-FAM18	NTDWADYDQSQGDTVTAGDRFALQQDGTILRGETLTYNLEQQTGEAHNVRMETEHGGRRLQ	180
NMB0280	NTDWADYDQSQGDTVTAGDRFALQQDGTILRGETLTYNLEQQTGEAHNVRMEIEQGGRRLQ	180
NMA2207	NADWADYDQSQGDTVTAGDRFALQQDGTILRGETLTYNLEQQTGEAHNVRMETEHGGRRLQ	180
	:*****	*****
Imp-FAM18	SVSRTAEMLGEGHYKLTELQFNTCSAGDAGWVKAASVEADREKGIGVAKHAAFVFGGPV	240
NMB0280	SVSRTAEMLGEGHYKLTELQFNTCSAGDAGWVKAASVEADREKGIGVAKHAAFVFGGPV	240
NMA2207	SVSRTAEMLGEGHYKLTELQFNTCSAGDAGWVKAASVEADREKGIGVAKHAAFVFGGPV	240
	:*****	*****
Imp-FAM18	IFYTPWADFPLDGNRKSGLLVPVLSAGSDGVSLSPVYYFNLAPNLDATFAPSVIGERGAV	300
NMB0280	IFYTPWADFPLDGNRKSGLLVPVLSAGSDGVSLSPVYYFNLAPNLDATFAPSVIGERGAV	300
NMA2207	IFYTPWADFPLDGNRKSGLLVPVLSAGSDGVSLSPVYYFNLAPNLDATFAPGVIGERGAV	300
	:*****	*****
Imp-FAM18	FDGQVRYLRPDYAGQSDLTWLPHDKSGRNRRYQAKWQHRRHISDTLQAGVDFNQVSDSG	360
NMB0280	FDGQVRYLRPDYAGQSDLTWLPHDKSGRNRRYQAKWQHRRHISDTLQAGVDFNQVSDSG	360
NMA2207	FDGQVRYLRPDYAGQSDLTWLPHDKSGRNRRYQAKWQHRRHISDTLQAGVDFNQVSDSG	360
	:*****	*****
Imp-FAM18	YYRDFYGNKEIAGNVNLNRRWLDDYGRAAGGSLNAGLSVLKYQTLANQSGYKDKPYALM	420
NMB0280	YYRDFYGNKEIAGNVNLNRRWLDDYGRAAGGSLNAGLSVLKYQTLANQSGYKDKPYALM	420
NMA2207	YYRDFYGNKEIAGNVNLNRRWLDDYGRAAGGSLNAGLSVLKYQTLANQSGYKDKPYALM	420
	:*****	*****
Imp-FAM18	PRLSADWRKNTGRAQIGVSAQFTRFSHDSRQDGSRLVVYPDIKWDFNSNSWGYVRPKLGH	480
NMB0280	PRLSVEWRKNTGRAQIGVSAQFTRFSHDSRQDGSRLVVYPDIKWDFNSNSWGYVRPKLGH	480
NMA2207	PRLSADWRKNTGRAQIGVSAQFTRFSHDSRQDGSRLVVYPDIKWDFNSNSWGYVRPKLGH	480
	:*****	*****
Imp-FAM18	ATYYSLNRFGSQEARRSRTLPIVNIDSGATFERNTRMFGGGVILQTLPEPLFYNYIPAKS	540
NMB0280	ATYYSLNRFGSQEARRSRTLPIVNIDSGATFERNTRMFGGEVILQTLPEPLFYNYIPAKS	540
NMA2207	ATYYSLNRFGSQEARRSRTLPIVNIDSGMTFERNTRMFGGGVILQTLPEPLFYNYIPAKS	540
	:*****	*****
Imp-FAM18	QNDLPNFDSSESSFGYQQLFRENLYGNDRINTANSLAAVQSRILLDGATGEERFRAGIG	600
NMB0280	QNDLPNFDSSESSFGYQQLFRENLYGNDRINTANSLAAVQSRILLDGATGEERFRAGIG	600
NMA2207	QNDLPNFDSSESSFGYQQLFRENLYGNDRINTANSLAAVQSRILLDGATGEERFRAGIG	600
	:*****	*****
Imp-FAM18	QKFYFKDDAVMLDGSVGKKPRNRSDWVAFASGSIGSRFILDSSIHYQNNDKRAENYAVGA	660
NMB0280	QKFYFKDDAVMLDGSVGKKPRNRSDWVAFASGSIGSRFILDSSIHYQNNDKRAENYAVGA	660
NMA2207	QKFYFKNDAVMLDGSVGKKPRRSRSDWVAFASSGIGSRFILDSSIHYQNNDKRAENYAVGA	660
	:*****	*****
Imp-FAM18	SYRPAQGKVLNARYKYGRNEKIELKSDGSFYDKLSQLDSAQWPLTRNLSAVVRYNYGF	720
NMB0280	SYRPAQGKVLNARYKYGRNEKIELKSDGSFYDKLSQLDSAQWPLTRNLSAVVRYNYGF	720
NMA2207	SYRPAQGKVLNARYKYGRNEKIELKSDGSFYDKLSQLDSAQWPLTRNLSAVVRYNYGF	720
	:*****	*****
Imp-FAM18	EAKKPIEMLAGAEYKSSCGCWAGVYAQRYVTGENTYKNAFFSLQLKDLSSVGRNPADR	780
NMB0280	EAKKPIEVLAGAEYKSSCGCWAGVYAQRYVTGENTYKNAFFSLQLKDLSSVGRNPADR	780
NMA2207	EAKKPIEVLAGAEYKSSCGCWAGVYAQRYVTGENTYKNAFFSLQLKDLSSVGRNPADR	780
	:*****	*****
Imp-FAM18	MDVAVPGYIPAHSLSAGRNP 802 <u>(SEQ ID NO: 27)</u>	
NMB0280	MDVAVPGYITAHSLSAGRNP 802 <u>(SEQ ID NO: 28)</u>	
NMA2207	MDVAVPGYIPAHSLSAGRNP 802 <u>(SEQ ID NO: 29)</u>	
	:*****	*****

Figure 8

REPLACEMENT SHEET

**A** (SEQ ID NO: 2)

MIEKLTFGFLFKKEDARSFMRLMAYVRPYKIRIVAALIAIFGVAATESYLAAFIAPLINHG  
FSAPAAPPELSAAAGIISTLQNWRQFTYMWGTCENKIWTPLFLIILVIRGICRFTST  
YLMTWVSVMTISKIRKDMFAKMLTLSSRYHQETPSGTVMNMNLTEQSVDNASDIFTVL  
TRDTMIVTGLTIVLLYLNWQLSLIVVLMFPLLSLLSRYRDRLKHVISDSQKSIGTMNNV  
IAETHQGHRVVKLFNGQAQAANRFDAVNRTIVRLSKKITQATAAHSPFSELIASIALAVV  
IFIALWQSQNGYTTIGEFMAFIVAMLQMYAPIKSLANISIPMQTFLAAGVCAFLDTPP  
EQDKGTLAPQRVEGRISFRNVDVEYRSRGKALDNFNLDIRQGERVALVGRSGSGKSTVV  
NLLPRFVEPSAGNICIDGIDIADIKLDCRAQFALVSQDVFLFDDTLFENVRYSRPDAGE  
AEVLFALQTANLQSLIDSSPLGLHQPIGSNGSNLSGGQRQRVAIARAILKDAPILLDEA  
TSALDNESERLVQQALERLMENRTGIIVAHRLTTIEGADRIIVMDDGKIEQGTHEQLMS  
QNGYYTMLRNISNKDAAVRTA

**B** (SEQ ID NO: 4)

MLAWRPGRPDGCQAAGGRRYNPGHDCIKASVSLNSAARNAPAGSQPVKAELWKRVYSRVGSYWKGLVLA  
VLLMAGAAATQ  
PTLAVIMKPLDDGFGAKPHYVWFPLAVVGLILLRGICNFFSDYLLAWVANNVLRGIRGEMFERLLG  
LPDADFKRGDT  
GRLLNRFTIDAGNVTGYATDVITVLVRETLVVIALLIGVLLYMSWALTLIILVMLPVSVGIARAFTRRLR  
RINRETVNMNA  
ELTRVVSEGIDGQRVIKLFDGYDAERRRFDFVNSRLRRFAMRSATADAALTPLTQVCISVAVGAVIAVA  
LSQANSGALT  
GSFASFMAALAQIFDPIKRLTNLAGKMQKMLVAAESVFTLVDQTPEADAGTRALPEPVRGKVEFRAVSH  
RFPDADRD  
AVSFLVEPGQTVALVGRSGSGKTTLVNMLPRFVLPGGDILFDDVPIQDLTLRSLRSHLSLVSQDVVL  
DDTIAANVGYG  
AGGTVDARVRDALAAANLLEFDGLPLGIHTPGQNAARLSGGQRQLAIARALIKNAPVLILDEATS  
ALDNESERQVQ  
ASLERLMRGRTTLVIAHRLSTVQNAADRIIVLDAGKIVEHGPHSELLAANGLYASLYNMQFRED

Figure 14

REPLACEMENT SHEET

(SEQ ID NO: 3)

atgatagaaaaactgactttcgactgtttaaaaaaaagaagacgcgcgcagctttatgcgc  
ctgatggcgtaacgtccgcgcctacaaaatccgcacgcgttgcgcgcctgattgcatttc  
ggcgttgcgcgcacccgaaagctacccgcgcctcatgcgcgcgcgcgcgcgcgcgc  
ttttccgcacccgc  
caaaaactggcgcaacagttacctatatggttggggacgaaaacaaaatctggacc  
gtccgcgccttcctcatcatccgcgtcatccgcgcgcgcgcgcgcgcgcgcgc  
tatctgatgactgggtctccgtatgaccatcagcaaaatccgcgcgcgcgcgc  
aaaatgctgacccttcctccgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc  
aatatgctcaacctgaccgaacagtcgttcgcgcgcgcgcgcgcgcgcgc  
acgcgcgcacacgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc  
ctcagccctcatcgtcgtcgtatgttccctgcgcgcgcgcgcgcgc  
gaccgtctgaaacacgcgcgcgcgcgcgcgcgcgcgcgcgc  
attggcgaaccatcaggagacaccgcgtcaagcttcaacgggcaggcgcaggcgc  
gcaaaaccgggttcgcgcgtcaaccgcaccatcgtccgcctcagcaaaaatcgc  
gcaacggcgcgcacattcccggtcagcgcgcgcgcgcgcgcgc  
atcttcatgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc  
ttcatcgtcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc  
cctatgcagacgcgcgcgcgcgcgcgcgcgcgcgcgc  
gaacaggagaaggcgcgcgcgcgcgcgcgcgcgcgc  
gtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtcgtc  
agacaaggcgaacgcgtcgcgcgcgcgcgcgcgcgc  
aacctgtcgcgcgcgcgcgcgcgcgcgcgcgc  
atcgcgcgcgcgcgcgcgcgcgcgcgcgc  
ttcctgtttgacgcacccgtttgaaaacgtccgcgcgc  
gccgaagtccgttgcgcgcgcgcgcgcgcgc  
ctcgactgcacccgcgcgcgcgcgcgc  
cgcgtcgcgcgcgcgcgcgcgcgc  
accagcgcattagacaacgcgcgcgcgcgc  
gaaaaccgcacccgcgcgcgcgcgc  
atcatcgtatgacgcgcgcgcgcgc  
caaaacggttactacacgcgcgcgc  
gcataa

Figure 15 A

REPLACEMENT SHEET

(SEQ ID NO: 5)

Figure 15 B